Dynamics-Mediated Charge Transport in Double Helical DNA

Melanie A. O'Neill and Jacqueline K. Barton

Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, California 91125

Supporting Information

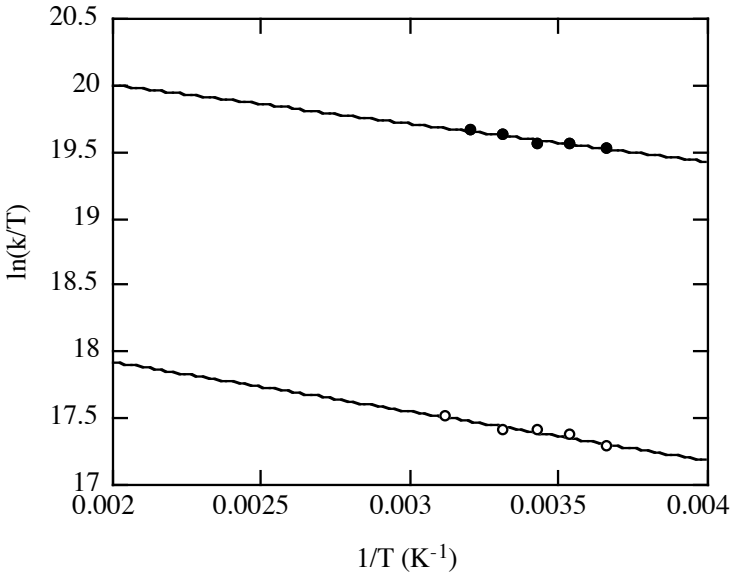

Figure S-1. Arrhenius-Eyring plots describing the dependence of k_{CT} on temperature in ApG (closed circles) and ApAG (open circles) DNA duplexes ($\ln(k/T) = \ln(k_B/h) + \Delta S^*/R - \Delta H^*/RT$). Here k_{CT} is defined as $k_{CT} = k_G - k_I$, where k_G and k_I are the decay rate constants in the redox active (G) and redox-inactive (I) assemblies, respectively. The rate constants were obtained by femtosecond transient absorption spectroscopy and correspond to the fast component of the decay of Ap* from a biexponential fitting.[23]